



PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING

To:

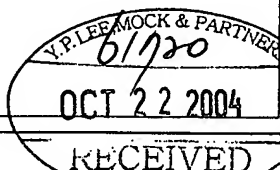
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PCT

WRITTEN OPINION

(PCT Rule 66)



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Date of mailing
(day/month/year) 15 OCTOBER 2004 (15.10.2004)

Applicant's or agent's file reference
PH-18060-PCT

RECEIVED

REPLY DUE within 1 months from
the above date of mailing

International application No.

PCT/KR2003/001903

International filing date (day/month/year)

18 SEPTEMBER 2003 (18.09.2003)

Priority date (day/month/year)

18 SEPTEMBER 2002 (18.09.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC7 C07K 7/06

Applicant

POSTECH FOUNDATION et al

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When ? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d)

How ? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3
For the form and the language of the amendments, see Rules 66.8 and 66.9

Also For an additional opportunity to submit amendments, see Rule 66.4
For an examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 08 JANUARY 2005 (08.01.2005)

Name and mailing address of the IPEA/KR

Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

PARK, JEONG UNG

Telephone No. 82-42-481-8159



WRITTEN OPINION

International application No.

PCT/KR2003/001903

I. Basis of the opinion

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

WRITTEN OPINION

International application No.

PCT/KR2003/001903

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	6-13	YES
	Claims	1-5	NO
Inventive step (IS)	Claims	6-13	YES
	Claims	None	NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims	None	NO

2. Citations and explanations

본원발명은 Phospholipase D(PLD; 세포인지질 분해효소)와 세포내에서 결합하는 질병에 관련된 펩타이드 복합체에 관한 것이다. 또한, 이 PLD와 그 복합체의 결합여부를 조절함으로써 질병 치료 및 예방할 수 있는 효과적인 활성물질을 발견할 수 있는 탐색 시스템의 제조방법에 관한 것이다.

D1: Kim, J.H. etc., Biochemistry 41(10), 3414-3421 (2002.03)

D2: Slaaby, R. etc., Biochem J. 351(Pt3), 613-619 (2000.11)

D3: Lee, S. etc., J. Biol. Chem. 277(8), 6542-6549 (2002.02)

1. 신규성

본원발명의 특허청구범위 제1항 내지 제5항은 PLD와 세포내에서 결합하는 질병에 관련된 펩타이드 복합체를 청구하고 있으나, D1, D2 및 D3문헌에는 각각 PLD와 aldolase, CRMP-2 및 PLC-감마1과의 복합체 형성에 관한 내용이 기재되어 있으므로, 본원발명의 특허청구범위 제1항 내지 제5항은 상기 인용문헌과 동일한 펩타이드 복합체를 청구하는 것으로 인정됨 [PCT Article 33(2)].

2. 진보성

인정됨 [PCT Article 33(3)].

3. 산업상 이용가능성

인정됨 [PCT Article 33(4)].